GENUSOV, A.Z.; KIMBERG, N.V., kand. sel'khoz. nauk; KOCHUBEY, M.I.; SHUVALOV, S.A.; TIKHONOVA, I., red.

[Soils of the Uzbek S.S.R.] Pochvy Uzbekskoi SSR. Tashkent, Izd-vo "Uzbekistan." Vol.3. 1964. 294 p. (MIRA 18:3)

1. Akademiya nauk Uzbekskoy SSR, Tashkent. Institut pochvo-vedeniya.

KOCHUBEY, M. I. Cand Biol Sci -- (Diss) "Role of floods in the formation
of soil in the Amu-Dar/ya delta." Tashkent, 1959. 15 pp with diagrams
(Acad Sci Uzbek SSR. Inst of Soil Science), 150 copies (KL, 36-58, 111)

-15-

KINBERG, N.V.; KOCHUBEY, M.I.; SUCHKOV, S.P.

Classification of the soils of the agricultural regions of Uzbekistan.
Pochvovedenie no.6:76-84 Je '60. (MIRA 13:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khlopkovodstva.
(Uzbekistan--Soils--Classification)

KOCHUBEY, N., polkovnik

How to prepare and carry out tactical supply operations in the rear.
Tyl i snab. Sov. Voor. Sil. 21 no.8:22-27 Ag '61.   (MIRA 14:12)
(Military education)

GAZHIYEV, V.V.; KONONYUK, O.Ya.; KOCHUBEY, P.O.

Role of agricultural animals in the epidemiology of leptospirosis
in Donetsk Province. Zhur.mikrobiol.,epid. i immun. 41 no.5:67-70
My '64.   (MIRA 18:2)

1. Donetskiy meditsinskiy institut i Donetskaya oblastnaya
veterinarnaya laboratoriya.

KOCHUBEY, S.M.; STAVRAKI, G.I. [Stavraki, H.L.]

Testing the validity of some classical formulae in crystal
optics in the exciton absorption region. Ukr. fiz. zhur. 8
no.9:999-1007 S '63.   (MIRA 17:8)

1. Institut fiziki AN UkrSSR, Kiyev.

KOCHUBEY, S.M.

Characteristics of the electron vibration spectrum of mono-
deuterobenzene. Ukr. fiz. zhur. 9 no.1:46-50 Ja '64.
(MIRA 17:3)

1. Institut fiziki AN UkrSSR, Kiyev.

ACCESSION NR: AP4043008   8/0051/64/017/002/0213/0218

AUTHOR: Kochubey, S. M.

TITLE: Manifestation of mulecule symmetry in the spectrum of a crystal

SOURCE: Optika i spektroskopiya, v. 17, no. 2, 1964, 213-218

TOPIC TAGS: benzene, deuterated compound, crystal symmetry, molecular spectrum, absorption spectrum, spectrum analysis

ABSTRACT: It is shown that the spectra of molecular crystals can be interpreted on the basis of the singularities of the symmetry of the molecule in the crystal. The effectiveness of the method is demonstrated by using the spectra of crystalline benzene and mono-deuterobenzene as examples. It is claimed that this approach eliminates many of the difficulties in the interpretation of the singularities in the absorption spectra of such molecules. Different

Cord   1/3

ACCESSION NR: AP4043008

approximate model representations of the molecule symmetry must be
used to explain different singularities of the spectrum. The ap-
pearance of absorption in the region of the supplementary series is
related with the appearance of several fundamental oscillations
that are forbidden in a molecule with high symmetry. Since this
interpretation is not unique, it needs to be verified, one of the
methods being a comparative analysis of the spectra of crystalline
pairs such as benzene and deuterobenzene. Comparison of the absorp-
tion spectra of the vapors of these two substances shows that sub-
stitution of deuterium for hydrogen barely changes the symmetry of
the molecule in the crystal. However, comparison of the spectra
of the two substances in the region of the supplementary series shows
that each has spectral bands missing from the other. These bands
are interpreted and reasons for their occurrence are suggested.
"The author is grateful to V. L. Broude for guidance and to Yo. P.
Sheka for a discussion." Orig. art. has: 2 figures and 2 tables.

Card   2/3

ACCESSION NR: AP4043008

ASSOCIATION: None

SUBMITTED: 08Jul63

SUB CODE: OP

NR REF SOV: 006

ENCL: 00

OTHER: 005

Card 3/3

ACCESSION NR: AP4013468

S/0181/64/006/002/0354/0360

AUTHORS: Broude, V. L.; Kochubey, S. M.

TITLE: The exciton spectra of mixed crystals

SOURCE: Fizika tverdogo tela, v. 6, no. 2, 1964, 354-360

TOPIC TAGS: exciton, mixed crystal, molecular crystal, light absorption, absorption band, benzene, naphthalene

ABSTRACT: The authors have considered a previously proposed theory on exciton absorption of light in mixed molecular crystals (V. L. Broude and E. I. Rashba, FTT, 3, 1941, 1961) and have compared it with experimental data. The theory maintains that the amplitudes of excitation of different kinds of molecules occupying identical positions in the unit cell are equal. In the present comparison they have used data on mixed benzene-naphthalene crystals and have found the theory to be perfectly satisfactory for determining the position of the absorption band associated with impurity exciton zones and for determining the distribution of intensities within these zones. No deviations of theoretical results from experimental data were obtained that were greater than expected from

Card 1/2

ACCESSION NR: AP4013488

errors in measurement. "In conclusion, the authors express their thanks to E. I. Rashba and Ye. F. Sheka for active participation in and discussion of the present work." Orig. art. has: 5 figures and 3 formulas.

ASSOCIATION: Institut fiziki AN SSSR, Kiev (Institute of Physics AN SSSR)

SUBMITTED: 01Jul63　　　　DATE ACQ: 03Mar64　　　　ENCL: 00

SUB CODE: SS, NO　　　　NO REF SOV: 009　　　　OTHER: 000

Card 2/2

KOCHUBEY, T. A.

At the Dnepropetrovsk Mining Institute in Artem Sergeyev from April 1939 to April 1947, the following dissertations were defended in connection with attaining the scholarly degree of Candidate of Technical Science (specializing in mining electrical engineering: T. A. Kochubey on 29 July 1940 defended his dissertation on the subject of "The automatization of charging storage batteries for electric mine locomtives".

The official opponents of this dissertation were Doctor of Technical Sciences Professor P. P. Pirotskiy and Candidate of Technical Sciences Docent S. A. Volotkovskiy.

Detailed critical analysis was given of the systems used for automatizing the charging of storage batteries in the USSR and abroad. The "Poler" automatic device used for charging acid batteries, and the glass mercury rectifier, were checked experimentally. Operational recommendations and instructions were compiled.

SO: Elektrichestvo [Electricity], No. 10, October 1947. Moscow.

KOCHUBEY, V.G., inzh.

Second Coordination Conference on the Manufacture of Refrigerating
Machines. Khol.tekh. 39 no.4:52-54 Jl-Ag '62.   (MIRA 17:2)

Kochubey, Ye.P.

- USSR/Soil Science - Genesis and Geography of Soils.   J-2

Abs Jour   : Ref Zhur - Biol., No 3, 1958, 10473

Author   : Kalashnikov, A.I., Kimberg, N.V., Kochubey, Ye.P.,
             Kochubey, M.I.

Inst   : Institute of Soil Science, Academy of Sciences UzSSR

Title   : The Soils of the Right Bank Region of the Lower Amu-Dar'ya

Orig Pub   : Tr. In-ta pochvoved. Aknd Nauk UzSSR, 1956, No 2, 3-92

Abstract   : The results are given of an investigation of 700,000 hec-
             tares of the right bank of the Amu-Dar'ya delta. The
             meadow soils of the region can be divided into two groups:
             those which have been intensively built up by alluvial de-
             posits from the regular floods and those which have been
             weakly built up. The soils of low-lying areas are distin-
             guished by their heavier mechanical composition, and occa-
             sionally by their salinity (112-186 tons/hectare and less

Card 1/4

Abs Jour   : Ref Zhur - Biol., No 3, 1958, 10473

of soluble salts in the three-meter layer). The meadow
carbonate soils are formed where the ground water is not
far from the surface; they contain 0.6-3.0% humus, are
poor in P, and rich in N and K. These soils can be di-
vided into three categories: salt-free, weakly saline
(139 T/hectare of salts), and heavily saline (241 T/
hectare of salts). The salts are a chloride-sulfate mix-
ture. Marshy and meadow-marshy soils occupy a comparati-
vely small area. Solonchaks occupied ~ 9.5% of the inves-
tigated area and fall into the following categories: ty-
pical, meadow, marshy, and residual. On the average the
solonchaks contain 746 tons of salts per hectare, with
chloride-sulfate and sodium-magnesium mixtures predomina-
ting. The meadow and marshy solonchaks, which are adap-
ted to low-lying areas, occupy 1% of the region. Mea-
dow-desert and meadow-takyr soils are formed in the chan-
nels of dried up rivers under conditions of weakened

Card 2/4

ACC NR: AP7000441   (A)   SOURCE CODE: UR/0322/66/000/005/0133/0137

AUTHOR: Anoshin, I. M.; Kochubey, Yu. I.

ORG: Krasnodar   Polytechnic Institute (Krasnodarskiy politekhnicheskiy institut)

TITLE: Increasing the flow velocities in a vertical rotary apparatus

SOURCE: IVUZ. Pishchevaya tekhnologiya, no. 5, 1966, 133-137

TOPIC TAGS: mass transfer, flow rate, absorption coefficient, ROTATION

ABSTRACT: Investigation of mass transfer processes in rotary absorbers and rectifiers
has shown that they have significantly different capacities, due to turbulizing of the
phases by the introduction of mechanical energy. It has been shown that the rate of
mass transfer in different zones of the active space is not identical. In these cases,
steady state films cannot exist, and the rate of molecular transfer is considerably
less than the rate of turbulent transfer. The article describes the design of a
laboratory model of an apparatus of the labyrinth type, whose geometric dimensions are
such that all the active space is utilized. The construction of the apparatus is
shown in Figure 1. Rotating plates of conical form with concentrically arranged rings,
2, are attached to vertical shaft, 1. The distance between rings is not identical, but
increases toward the center; however, the areas between rings are equal, and are
77.6 cm^2. An immovable cone, 4, is attached to the housing, 3. On the surface of the

Card 1/2   UDC: 66.048.3

housing, there are fastened four channels, 6, which end in overflow openings to whose
ends there are attached the cones, 8. On the inner surface of the immovable cone, 4,
are attached rings which, together with the rings of the rotating plates, form a
labyrinthine channel. This construction makes it possible to achieve a maximum
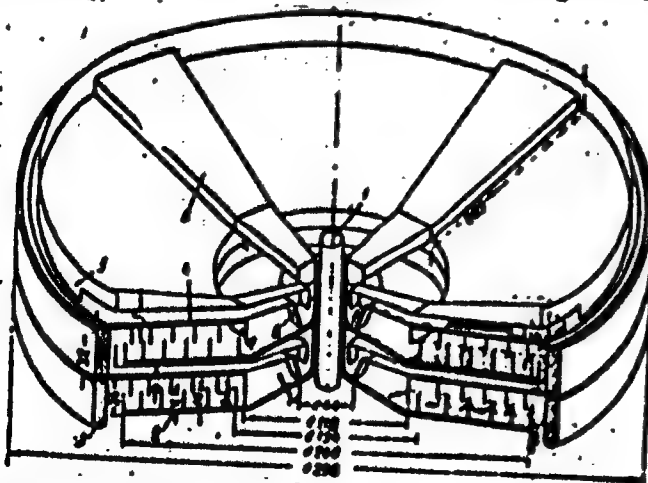capacity of the apparatus with minimum dimension. Orig. art. has: 3 figures.

Figure 1.

Card 2/2

10049

KOCHUBEYEV, A.

...sed Draft in Boilers and the Utilization of Loco-
...ive Power," Directorate Gen. of Rolling Stock...

...transport... No 10 ... 47-...., 1947

KOCHUBEYEV, A.

Kochubeyev, A. "On utilizing the efficiency of FD-21 locomotives,"
Zh.-d. transport, 1948, No. 12, pp. 43-50

SO: U-3264, 10 April 53 (Letopis 'Zhurnal 'nykh Statey, No. 4, 1949).

KOCHUBEYEVA, M. T.

Combining of the manufactures in the distilling industries of the U.S.S.R. Spirt. prom. 29 no.3:35-37 '63.
(MIRA 16:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut fermentnoy i spirtovoy promyshlennosti.

(Distilling industries)

KOCHUBIN, B.A.

Experience in using 14N-12x2 centrifugal pumps in petroleum
pumping stations. Transp. i khran. nefti no.1:6-9 '63.
(MIRA 16:9)

1. Saratovskoye rayonnoye nefteprovodnoye upravleniye.

KOCHUBIN, Ye., inzh.

"Electric power transmission lines in the high mountains of
Armenia " by D.B.David'an. Reviewed by E.Kochibina.
Prom. Arm. 4 no.12:83-84 D '61.   (MIRA 15:2)
          (Armenia—Electric lines, Overhead)
          (Davidian, D.B.)

KOCHUBIYEVSKIY, Y.D., inzhener.

Simple method of measuring small amounts of alternating current.
Elektrichestvo no.5:89 My '54.   (MLRA 7:6)
        (Electric measurements)

BROVMAN, Ya.S.; KOCHUBIYEVSKIY, F.D.; FEL'DMAN, A.V.

Transistor amplifiers in regulated electric drives.
Elektrichestvo no.5:32-38 My '62.   (MIRA 15:5)

1. Novosibirskiy zavod tyazhelykh stankov i krupnykh
gidropressov.
                    (Electric driving)
               (Transistor amplifiers)

BROVMAN, Yakov Semenovich; KAGAN, Valeriy Gennadiyevich;
KOCHUBIYEVSKIY, Felike Davydovich; NAVDIS, Veniamin
Abramovich; CHILIKIN, M.C., red.; LEBEDEV, A.M., red.

[Direct current systems with amplidyne amplifiers] Si-
stemy postoiannogo toka s elektromashinnymi usiliteliami.
Moskva, Energiia, 1964. 79 p. (Biblioteka po avtomatike,
no.119; elektroprivody s poluprovodnikovym upravleniem)
                                        (MIRA 18:1)

BROVMAN, Yakov Semenovich; KAGAN, Valeriy Gennadievich; KOCHUBIYEVSKIY, Feliks Davydovich, CHILIKIN,M.G.,prof.,red.

[Electric drives with transistor control. Systems with electromechanical converters (PMK - G - D)] Elektroprivody s poluprovodnikovym upravleniem. Sistemy s elektromashinnymi preobrazovateliami (PMK - G - D). Moskva, Energiia, 1964. 88 p. (Biblioteka po avtomatike, no.107)

(MIRA 17:9)

KOCHUBIYEVSKIY, I.D. [Kochubiievs'kyi, I.D.] (Vladivostok); STRAZHMEYSTER, V.A. [Strazhmeister, V.O.] (Vladivostok)

Use of rotary transformers in servomechanism drives. Avtomatyka no. 5:33-45 '60.　　　　　　　　　　　　　　　　(MIRA 14:4)

(Servomechanisms)

S/024/62/000/005/007/012
E140/E133

16.4000

AUTHOR: Kochubiyevskiy, I.D.   (Vladivostok)

TITLE: On the rational choice of precision in automatic control systems

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye tekhnicheskikh nauk. Energetika i avtomatika, no.5, 1962, 118-122

TEXT: An information-theory approach is adopted to the problem of precision in the automatic control of machine tools. A measure of information is defined. The effects of different assignments of precision between the control system and the measurement system are discussed. It is found that the system parameters are superior for the case where the precision of the measurement system is such that all error can be practically ascribed to the servosystem.
There are 2 figures.

SUBMITTED: February 19, 1962

Card 1/1

16.8000

S/102/62/000/006/001/005
D201/D308

AUTHOR: Kochubiyevs'kyy, I.D. (Vladivostok)

TITLE: Selection of the error coefficients of compound
               loops in complex feedback automatic control systems

PERIODICAL: Avtomatyka, no. 6, 1962, 3-9

TEXT: The author proposes a method of determining the
error coefficients for compound loops, as required for minimization
of error ε of the automatic control system. The main closed loop
is assumed to be already determined and the parameters of its com-
ponents evaluated analytically. The method is presented in two
parts: in the first part the error coefficients are found for the
case of non-random inputs when the system error may be represented
as the sum of the command and disturbance errors. In the second
part the error coefficients are evaluated for stationary random
inputs by evaluation of the r.m.s. error from the spectral distribu-
tion of the input. There are 3 figures.

SUBMITTED: March 27, 1961
Card 1/1

L 9991-63   EWT(d)/BDS--AFFTC/ASD/AFOC--Pg-4/Pk-4/Pl-4/Po-4/Pq-4--SC/IJP(C)

ACCESSION NR: AP3001383   8/0144/63/000/003/0375/0380

AUTHOR: Kochubiyevskiy, I. D.   73

TITLE: Evaluating the accuracy of reproduction of follow-up systems

SOURCE: IVUZ. Elektromekhanika, no. 3, 1963, 375-380

TOPIC TAGS: follow-up system error

ABSTRACT: Relations between the rms error of a follow-up system (in reproducing
a random signal) and the quantity of output information are investigated
mathematically. Requirements for the frequency characteristic of a follow-up
system are determined which would keep the error of signal reproduction below
a specified limit. It is shown how the accuracy of signal reproduction can be
evaluated from the shape of the frequency characteristic. It is pointed out that
the information properties of the follow-up system are determined by the logarithm
of the reciprocal of mean square of the frequency-characteristic modulus. Orig.
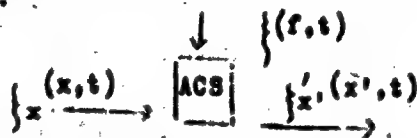art. has: 2 figures and 38 formulas.

Card   1/2

S/020/63/148/006/005/023
B112/B186

AUTHORS: Kochubiyevskiy, I. D., Ulanov, O. M.

TITLE: Information conditions for the invariance of linear automatic control systems

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 148, no. 6, 1963, 1268-127D

TEXT: This paper is an attempt to reduce information theory and the theory of statistical optimization to the determination of invariance conditions. An automatic control system (ACS) is symbolized by the following graph:

$$\{x \xrightarrow{(x,t)} \boxed{ACS} \xrightarrow{\downarrow \{(f,t)} \{'_{x'}(\bar{x}',t)$$

For such a system the equation of information reads

Card 1/2

Information conditions for the ...

S/020/63/148/006/005/023
B112/B186

$$\mathcal{H}_2(\mathfrak{k}') = \mathcal{H}_1(\mathfrak{k}) + \frac{1}{2\pi} \int \log |\Phi(j\omega)|^2 d\omega.$$

(2)

Some consequences are derived from the condition of absolute invariance. In particular, it is shown that each Wiener optimum system can be determined. by means of the theory of invariance. There. is 1 figure.

PRESENTED: July 23, 1962, by B. N. Petrov, Academician

SUBMITTED: July 1, 1962

Card 2/2

KOCHUBIYEVSKIY, Il'ya Davidovich; STRAZHMEYSTER, Valentin Aleksandrovich; KELIM, Yu.M., red.; FRIDKIN, L.M., tekhn.red.

[Devices for measuring mismatch in servosystems] Izmeriteli ras-soglasovaniia slediashchikh sistem. Moskva, Gosenergoizdat, 1963. 79 p. (Biblioteka po avtomatike, no.86) (MIRA 17:3)

KOCHUBIYEVSKIY, I.D., kand.tekhn.nauk; STRAZHMEYSTER, V.A., inzh.

Universal dynamic load model for testing automatic control systems.
Elektrotekhnika 35 no.4:1-3 Ap '64.   (MIRA 17:4)

KOCHUBIYEVSKIY, I.D. (Vladivostok)

Efficiency of automatic control systems. Izv. AN SSSR. Tekh. kib.
no.3:134-140 Je '64.   (MIRA 17:10)

KOCHUBIYEVSKIY, Il'ya Davydovich; STRAZHMEYSTER, Valentin Aleksandrovich; TSATSENKIN, V.K., red.

[Dynamic modeling of loads in testing automatic control systems] Dinamicheskoe modelirovanie nagruzok pri ispyta-niiakh avtomaticheskikh sistem. Moskva, Energiia, 1965. 142 p. (Biblioteka po avtomatike, no.151) (MIRA 19:1)

ACC NR: AP7002236 *(Helvetchb)*   SOURCE CODE: UR/0280/66/000/006/0052/0056

AUTHOR: Zdor, V. V.; Kochubiyevskiy, I. D. *(Hehnachsh)*

ORG: none

TITLE: On a method of constructing the region of permissible values of the parameters of elements of automatic control systems

SOURCE: AN SSSR. Izvestiya. Tekhnicheskaya kibernetika, no. 6, 1966, 52-56

TOPIC TAGS: automatic control system, system reliability, automatic control design, parameter

ABSTRACT: Normally certain technical conditions of the design and construction of automatic control systems (ACS) are contradictory, e.g. accuracy versus reliability, cost versus complexity, etc. Hence at the very outset a compromise solution must be sought such as, without being rigorously optimal with respect to some conditions, will assure designing a system with acceptable effectiveness over the entire range of conditions. Here effectiveness may be construed as the probability that the constructed ACS will satisfy specified technical conditions and quality criterions under given operating conditions throughout the required period of

Card   1/2

ACC NR: AP7002236

time. In this connection, the authors propose a method of constructing the region of permissible values of the variable parameters of ACS elements, as based on the criterion of effectiveness. Thus if the state of ACS at every time instant may be represented by a n-variate vector whose components are the parameters of ACS, then the satisfaction of the effectiveness criterion requires that this vector remain within the confines of a specified region, with failure to adhere to these confines being regarded as an unfavorable event. It is shown that the magnitude of the effectiveness criterion is determined by integration over a time region, whose results characterize the system's ability to serve during a specified interval of time, and by integration over the region of the system's parameters, whose results determine the system's ability to assure a specified quality. The pertinent calculations require using digital computers. The employment of the effectiveness criterion represents a new approach to the design and construction of ACS and makes it possible to predict the probabilistic deviations of parameters in the process of operation and to formulate the problem of determining the optimal parameters. Orig. art. has: 4 figures, 9 formulas.

SUB CODE: 09, 14 / SUBM DATE: none/ ORIG REF: 004

Card 2/2

KOCHUGOV, P.I., dotsent, kand.tekhn.nauk

Investigating the causes of the straining of crank forging presses.
Sbor. LIIZHT no.168:231-241 '60. (MIRA 13:10)
(Deep drawing (Metalwork))

ALEKHIN, S.V., doktor tekhn. nauk, prof.; GROKHOL'SKIY, K.Y.,
     kand. tekhn. nauk, dots.; ZOLOTNIKOV, I.M., kand. tekhn.
     nauk, dots.; KOCHUGOV, P.I., kand. tekhn. nauk, dots.;
     MALYSHEV, O.N., kand. tekhn. nauk, prof.; KHLEBNIKOV, M.S.,
     kand. tekhn. nauk, retsenzent; PISAREV, N.G., kand. tekhn.
     nauk, dots., retsenzent; ODING, I.A., kand. tekhn. nauk,
     dots., retsenzent; KURENKOV, I.I., kand. tekhn. nauk,
     retsenzent; PROKOF'YEVA, Ya.I., inzh., retsenzent; YAKOVLEV,
     D.A., inzh., retsenzent; SERGEYEVA, I.N., red.

     [Design of technological processes for the manufacture of
     billets and parts for the rolling stock of railroads;
     methodological manual on the technological aspects of di-
     ploma projects prepared in institutions of higher learning
     of railroad transportation] Proektirovanie tekhnologicheskikh
     protsessov proizvodstva zagotovok i detalei podvizhnogo so-
     stava zheleznykh dorog; uchebno-metodicheskoe posobie po tekh-
     nologicheskoi chasti diplomnogo proektirovaniia v vuzakh zhe-
     leznodoroshnogo transporta. Moskva, Vses. zaochnyi in-t in-
     shenerov zhel-dor. transporta. Pt.1. 1964. 202 p.
                                              (MIRA 18:3)

S/123/61/000/008/008/013
A004/A104

AUTHOR: Kochugov, V.I.

TITLE: Investigating the causes of crank press overloads

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 8, 1961, 8, abstract
               8V46 ("Sb. Leningr. in-ta inzh. zh.-d. transp.", 1960, no. 168,
               231 - 241)

TEXT: Taking the example of a 600-ton press the author investigated the
causes of crank press overloading leading to a jamming of the slide block. He de-
termined the stresses under different stamping conditions. A simulated method was
employed on a press having a slide block speed 4 times greater than that of the
plant presses, with a component model having $\frac{1}{7}$ of the natural size. Based on the
data obtained it is corroborated that slide blocks are jammed as a result of over-
loads arising when blanks are supplied at a reduced temperature, when the presses
are set to the minimum thickness of the parts being die-forged according to their
lower tolerance limit, and when blanks of increased dimensions are cut. There are
6 figures and 13 references.

[Abstracter's note: Complete translation]   M. Peygin

Card 1/1

KOCHUGOVA, A.P., inzh.; YANTSEN, V.I., inzh.

Mine shaft signaling with signal transmissions from a
cage. Gor. zhur. no.7:70-71 Jl '63.   (MIRA 16:8)

1. Leninogorskiy polimetallicheskiy kombinat.

KOCHUGOVA, Ye.I.; GUREVICH, I.M.

Development of borate luminophors with erythermal action. [Trudy] OIPKH no.51:83-87 '64.
(MIRA 18:5)

TARASOV, G.P., inzh.; KOCHUKOV, I.G.

Use of VV-35 air switches. Prom.energ. 18 no.1:24-25 Ja '63.
(MIRA 16:4)

(Electric switchgear)

L 11103-63   EWT(d)/EAP(k)/EAP(q)/EAT(m)/BDS   AFFTC   Pf-4   JD/JG
ACCESSION NR: AP3000966   S/0135/63/000/005/0021/0024

AUTHOR: Il'yevskiy, I. I. (Engineer); Kochukov, N. S. (Engineer)   60

TITLE: Titanium brazing with rapid heating. No. 150740

SOURCE: Svarochnoye proizvodstvo, no. 5, 1963, 21-24

TOPIC TAGS: titanium-alloy brazing, molten-salt-bath brazing, controlled-atmosphere brazing, brazing alloy, brazed-joint strength

ABSTRACT: Since titanium forms intermetallic compounds with the usual constituents of brazing alloys (Cu, Ag, Ni, etc.), a brittle layer is formed between the base metal and the brazing alloy. It is therefore important to heat the parts to brazing temperatures as rapidly as possible. This can be done with high-frequency induction heating, which, however, is not always practicable. In a new method developed by the authors (Authors' Certificate No. 150740, 16 Jan 1961), the parts to be brazed are placed in a hermetically sealed, thin-walled, stainless-steel container, which is then immersed in a fused-salt ($BaCl_2$) bath. An overpressure of argon is maintained in the container to prevent inleakage of air. Since during

Card 1/2

L 11103-63
ACCESSION NR: AP3000966

the operation the container is immersed and upon removal from the bath is coated with a salt crust, no excessive oxidation occurs, and the service life of the container exceeds 1000 operations at brazing temperatures up to 1000C. The method was used in studying the effect of the heating cycle and the type of brazing alloy on the mechanical properties of brazed joints of VTZ-1 Ti alloy [4.0--5.2% Al, 1.5--2.5% Cr, 1.0--2.0% Mo]. The most satisfactory results were obtained with holding time of 1 to 2 min. Joints brazed with PSr72LMN brazing alloy (72% Ag, 26.5% Cu, 1% Ni, 0.5% Li; brazing temperature, 880C) had a shear strength of 18.3, 15.6, and 13.2 kg/mm^2 at 20, 200, and 400C, respectively; the corresponding figures for joints brazed with pure Ag were 17.4, 12.3, and 6.2 kg/mm^2. (All figures apply to joints made with a holding time of 2 min at brazing temperature.) Joints brazed with PSr72LMN alloy had a higher Vickers hardness in the intermetallic layer than those brazed with pure Ag, indicating a greater embrittling effect of Cu. The method can also be used for brazing stainless steels and heat-resistant alloys, as well as refractory metals, at temperatures up to 1300C. Orig. art. has: 8 figures and 2 tables.

ASSOCIATION: none
SUBMITTED: 00   DATE ACQ: 11Jun63   ENCL: 00
SUB CODE: MA,ML   NO REF SOV: 000   OTHER: 000
Card 2/2

KOCHUKOV, V.V.

First electric plows in the U.S.S.R. Trudy Inst.ist.est.i
tekh. 26:118-135 '59.   (MIRA 13:5)
(Plows) (Electricity in agriculture)

PROKOPYUK, A.; MIROSHNIKOV, I.; KOCHUKOVA, M.

Work practices of the leading crew of the Ussuri Feed Mill under
the Maritime Administration of Cereal Products. Muk.-elev.prom.
26 no.7:5-7 Jl '60.   (MIRA 13:8)

1. Direktor Ussuriyskogo kombikormovogo zavoda (for Prokopyuk).
2. Glavnyy inzhener Ussuriyskogo kombikormovogo zavoda (for
Miroshnikov). 3. Starshiy master Ussuriyskogo kombikormovogo
zavoda (for Kochukova).
(Ussuri--Feed mills)

MIROSHNIKOV, I.; KOCHUKOVA, N.

Efficient work of the workers of the Ussuriysk Combined Fodder
Factory. Muk.-elev. prom. 28 no.5:9-11 My '62.   (MIRA 15:5)

1. Glavnyy inzh. Ussuriyskogo kombikormovogo zavoda Primorskogo
kraya (for Miroshnikov). 2. Nachal'nik tsekha Ussuriyskogo
kombikormovogo zavoda Primorskogo kraya (for Kochukova).
                         (Ussuryak—Feed mills)

Kcc #

USSR/Pharmacology. Toxicology. Chemotherapeutical   V

Author   : Kochukova N. B.
Inst   : Institute of Tuberculosis Academy of Medical
            Sciences USSR
Title   : Blood Level of Phthivazid and the Excretion of
            the Drug from the Organisms of Tubercular Pati-
            ents (Uroven' ftivazida v krovi i vyvedeniye evo
            iz organisma bol'nykh tuberkulozom).

Orig Pub : Tr. in-ta tuberkuleza Akad. Med. nauk SSSR, 1956,
            8, 87-94

Abstract : Observations were conducted of 27 patients suf-
            fering from different forms of pulmonary tuber-
            culosis. Phthivazid (1) was administered in do-
            ses of 0.3 to 1 g in 24 hours. It was establidhed

Card 1/3

Abstract : that the level of 1 in the blood rose as the dose
            of 1 was increased, but that the rise did not de-

RADKEVICH, R.A., BOYARSHINOVA, M.S., YUSHUKOVA, N.G.

Some biochemical indication of the reaction of infected children
to repeated enteral administration of BCG vaccination. Probl.
tub 36 no.6:83-87 '58   (MIRA 11:10)

1. Iz Instituta tuberkuleza AMN SSSR (dir. Z.A. Lebedeva).
          (BCG VACCINATION, ther. use
              tuberc. in child., oral admin., biochem. determ.
              of reaction (Rus))
          (TUBERCULOSIS, in inf. & child.
              reaction to repeated oral admin. of BCG vacc., biochem.
              determ. (Rus))

KOCHUKOVA, T. N.

"Fluctuations in the Yearly Runoff of the Rivers of the USSR." Cand Geo g Sci, State Hydrological Inst, Leningrad 1954. (RZhGeol, Dec 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SO: Sum. No. 556 24 Jun 55

KOCHUKOVA, T.N.

Fluctuations of annual flow of rivers of the U.S.S.R. Trudy GGI
no.50:56-116 '55.
            (Rivers) (Stream measurements)   (MLRA 9:8)

KochuNov   K.M

MASONOV, V.M., inshener; laureat Stalinskoy premii; KOCHUNOV, K.M.,
inshener.

Experience in planning the first tall buildings in Moscow. Gor.
khoz.Mosk. 24 no.1:5-19 Ja '50.
     (Moscow--Skyscrapers) (Skyscrapers--Moscow)   (MLRA 7:11)

KOCHUNOV, K.M., inzhener.

For a useful assortment of hollow ceramic bricks. Gor.khoz.Mosk. 25 no.5:12-
14 My '51.
(MLRA 6:11)
(Hollow bricks)

KOCHUNOV, K.N., inzhener.

Pre'abricated hipped panels for ceilings of apartment houses and
public buildings. Stroi.prom. 32 no.6:22-25 Je '54. (MLRA 7:6)
(Ceilings)

KOCHUNOV,K.M., inzhener

Moscow State University type clay facing slabs. Rats. i izobr.
predl. v stroi. no.108:12-13 '55.   (MLRA 8:10)
                        (Walls)

DESOV, A.Ye., doktor tekhn.nauk, prof.; GORDON, S.S., kand.tekhn.nauk;
POPOV, L.N., kand.tekhn.nauk; KOCHUNOV, K.M., inzh.; KAZBEK, Z.A.,
inzh.; TSYURUPA, A.L., inzh.

Results of the examination of rolling mills operating with the
N.IA.Kozlov equipment and suggestions for improving the tech-
nology. Trudy NIIZHB no.33:205-225 '64.

(MIRA 18:2)

1. Nauchno-issledovatel'skiy institut betona i zhelezobetona
Gosstroya SSSR (for Desov). 2. Nauchno-issledovatel'skiy
institut zhelezobetonnykh izdeliy, stroitel'nykh i nerudnykh
materialov (for Gordon). 3. Nauchno-issledovatel'skiy institut
Glavnogo upravleniya po zhilishchnomu i grazhdanskomu stroitel'-
stvu v gorode Moskva (for Popov). 4. Moskovskiy institut t'povogo
i eksperimental'nogo proyektirovaniya (for Kochunov). 5. NIIStroy-
fiziki (for Kazbek). 6. Nauchno-issledovatel'skiy institut organi-
zatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu (for
TSyurupa).

Kochunov, P F

AUTHOR: Ostinskiy, A.P.   96-4-21/24

TITLE: A conference on the construction of the tail surfaces of
         boilers operating on sulphurous fuels. (Soveshchaniye
         po konstruktsiyam khvostovykh poverkhnostey kotlov,
         rabotayushchikh na vysokosernistykh toplivakh).

PERIODICAL: Teploenergetika, 1958,   No.4, pp.91-92 (USSR).

ABSTRACT: A scientific-technical conference on the development of
         new types of tail surfaces for boilers working on
         sulphurous fuels was convened by the Perm Power Directorate
         and the Regional Division of NTOEP and held in Perm in
         October, 1957.   The conference was attended by
         representatives of power systems working on sulphurous
         fuels and also by representatives of the All-Union Thermo-
         technical Institute, the Eastern Branch of the All-Union
         Thermo-Technical Institute, the Central Boiler Turbine
         Institute, ORGRES and the Taganrog Boiler Works.   Ten
         reports were made about investigations of sulphur corrosion,
         corrosion protection, and the development of new types of
         tail surfaces for boilers.
         Dr. Tech. Sc. N. V. Kuznetsov reported on the work of the
         All-Union Thermo-Technical Institute on the causes of
         sulphur corrosion of boiler heating-surfaces.   The Chief
Card 1/3 Engineer of Permenergo, P. F. Kochunov, described

A conference on the construction of the tail surfaces of boilers operating on sulphurous fuels.

SG-A-21/24

      successful experience with cast-iron elements and also with enamel protection on steel tubes. The representative of Mosenergo, Engineer Belyanin, also endorsed cast-iron elements. Engineer Mazel' of Bashkirenergo recounted the successful use of chemical additives to reduce corrosion and wear of tubes when burning Bashkirian fuel oil. Engineer V. V. Kazanskiy of Permenergo discussed methods of enamelling water-heater tubes and the resistance to corrosion of different sorts of enamel.

R. A. Petrosyan of the All-Union Thermo-Technical Institute described the reconstruction of the tail part of a boiler in the Zakansk Heat and Electric Power Station.

Cand.Tech.Sc. I. B. Varavitskiy of the All-Union Thermo-Technical Institute reported a new arrangement of tail heating surfaces with gas evaporators and steam heating of water adopted at the Kizelovsk regional electric power station.

Dr. Tech.Sc. N. V. Kuznetsov of the All-Union Thermo-Technical Institute, Engineer Lindkvist of Sverdlovenergo and Engineer Lakhman spoke on the theory, design and

Card 2/3 operation of small coiled heating surfaces, which have

A conference on the construction of the tail surfaces of boilers operating on sulphurous fuels.

96-4-21/24

been widely used in power stations in the Urals. Engineer Pitertsev of the Eastern Branch of the All-Union Thermo-Technical Institute reported on investigations of the best temperature conditions for flue gases and feed water. Participants in discussions included Engineers Demidov of Uralenergo and Pel'shtinskaya of Sverdlovenergo. The Conference recommended that boilers burning solid sulphurous fuels should have cast-iron air heaters. Mention was made of successful experience of the use of enamel and of additives to fuel oil. Future plans for the introduction and testing of new types of air-heaters were noted. The Conference directed the attention of the technical directorate of the Ministry of Power Stations and the All-Union Thermo-Technical Institute to the need for making combined investigations to prevent corrosion of boiler heating-surfaces and ash-removal equipment.

AVAILABLE: Library of Congress.

Card 3/3

BEREZOVA, Ye.F.; SOROKINA, T.A.; KOCHUNOVA, T.A.

Fertility of composted areas. Agrobiologiia no.1:37-40
Ja-F '64   (MIRA 17:8)

1. Moskovskoye otdeleniye Vsesoyuznogo nauchno-issledovatel'-
skogo instituta sel'skokhosyaystvennoy mikrobiologii.

USSR/Cultivated Plants - Grains.   M-2

Abs Jour : Ref Zhur - Biol., No 7, 1958, 29670

Author   : Pisemskaya, V.A., Kocinunova, T.A.

Inst   : Stavropol Scientific Research Institute for Agriculture

Title   : The Application of Bacterial Fertilizers to Winter Wheat
             in the Arid Zone of Stavropol'skiy Kray.

Orig Pub : Byul. nauchno-tekhn. inform. Stavrop. n.-i. in-ta s. kh.,
             1956, No 1-2, 52-53.

Abstract : Phosphate bacterin treatment of seeds not only increased
             the amount of phosphorus bacteria in the root region of the
             plants, but also that of nitrifying, nitric, silicate and
             other bacteria. All this produced a yield increase. The
             winter wheat increase in 1955 was 1.5 centners per hectare,
             and in 1956 2.1 centners/ha. The application of nitrate
             bacterin in 1955 boosted the output by 1.6 centners/ha.

Card 1/2

1. PETROV, S. G., PROF., MAKOTON, L. A., KOCHUNOV-KAYA, T. K.

2. USSR (600)

4. Eggs-Production

7. Increasing hens' egg laying in winter. Ptitsevodstvo no. 3, 1957.

9. **Monthly List of Russian Accessions**, Library of Congress, February 1953. Unclassified.

Kochur

POLAND / Chemical Technology. Leather. Fur. Gelatine. H
Tanning Agents. Technical Proteins.

Abs Jour: Ref Zhur-Khimiya, No 22, 1958, 76054.

Author : Kochur,
Inst   : Not given.
Title : The Application of Aluminum Alloys for Equip-
         ment Used in the Leather Industry.

Orig Pub: Przegl. skorzany, 1957, 12, No 4, 98-100.

Abstract: Pure aluminum can be used for thick wall col-
         lectors, tanks and autoclaves. Alloys of alum-
         inum and magnesium might be expediently used in
         manufacturing the equipment requiring increased
         resistance to mechanical strain or to alkaline
         solutions (liming). The light alloys of the
         duraluminum type can be expediently used for
         equipment that is used in the mechanical treat-
         ment of semi-finished product, i.e. for tables,
         etc.

Card 1/1   100

LAVROVA, L.P., kand.tekhn.nauk; DUBROVINA, L.I., starshiy nauchnyy sotrudnik;
MOROZOVA, L.I., mladshiy nauchnyy sotrudnik; KUCHERENKO, O.N.,
mladshiy nauchnyy sotrudnik; KOCHUR, A.Y., mladshiy nauchnyy
sotrudnik

Investigating the thermal processing of sausage products. Trudy
VNIIMP no.14:3-10 '62.

(Sausages)   (MIRA 16:8)

AUTHOR: Kochura, A.I.   SOV/21-58-11-2/28

TITLE: On the Asymptotic Expansion of the Solution of a Boundary
            Problem (Ob asimptoticheskom razlozhenii resheniya odnoy
            krayevoy zadachi)

PERIODICAL: Dopovidi Akademii nauk Ukrains'koi RSR, 1958, Nr 11,
            pp 1157 - 1161 (USSR)

ABSTRACT: The author considers a problem of diffraction type, put
            forward by O.I. Panich [Ref 1], for the case of two
            dimensions. He considers some limited region S in an
            infinite plane with a smooth circumference L. The
            function u is sought, which satisfies the following con-
            ditions:

            1) $\Delta u - K_e^2 u \quad = 0$ in S;

            2) $u_e/_L - u_i/_L;\ \Delta u - K_i^2 u = 0$ in $S_i;\ \dfrac{\partial u_e}{\partial n}\Big|_L = \dfrac{\partial_i}{\partial n}\Big|_L$;

            3) u has a singularity of the $\dfrac{1}{2\pi} Ln \dfrac{1}{R(P_0 P)}$ -type in the

Card 1/3   point $P_0 \in S_e$;

On the Asymptotic Expansion of the Solution of a Boundary Problem

4) u becomes a zero at infinity,
where k_1 is a large positive number.

The author shows that the function u_3 which meets the requirements written below, is an asymptotic expansion of u in the S_e-region up to the terms of the $\left(\frac{1}{k_i}\right)^\nu$-order. The requirements met are as follows:

1) $\Delta u_3 - K_e^2 u_3 = 0$ in S_e.

2) $u_3\big|_L = \left(\frac{1}{k_i} + \frac{\varkappa}{2k_i^2} + \frac{3\varkappa^2}{8k_i^3}\right)\frac{\partial u_3}{\partial n}\bigg|_L + \frac{1}{2k_i^2}(u)_{ss}\big|_L$;

3) u_3 has a singularity of the $\frac{1}{2\pi} Ln \frac{1}{R(P,P)}$ -type in the point $P_0 \in S_e$.

Card 2/3   4) u_3 becomes zero at infinity.

On the Asymptotic Expansion of the Solution of a Boundary Problem   SOV/21-58-11-2/28

    There are 6 Soviet references.

ASSOCIATION: Odesskiy gosudarstvennyy universitet im. I.I. Mechnikova
    (Odessa State University imeni I.I. Mechnikov)

PRESENTED: By Member of the AS UkrSSR, I.Z. Shtokalo

SUBMITTED: June 27, 1958

NOTE: Russian title and Russian names of individuals and insti-
    tutions appearing in this article have been used in the
    transliteration.

Card 3/3

KOCHURA, O.I.

Asymptotic expansion of the solution of a boundary problem. Pratsi
Od. un. sbir. mol. vchen. un. 146 no.3:109-114 '58 (MIRA 13:3)

1. Nauchnyy rukovoditel' - dots. O.I. Panich [O. I. Panych].
(Asymptotic expansions)

KOCHURA, A. I., Cand Phys-Math Sci -- (diss) "Asymptotic resolution of the solution of one problem of diffractional type." Odessa, 1960. 11 pp; (Ministry of Higher and Secondary Specialist Education Ukrainian SSR, Odessa State Univ im I. I. Mechnikov); 200 copies; price not given; (KL, 23-60, 121)

SHUNEVA, Z.S., kand. med. nauk; KOCHURA, G.M.; KRAS'KO, N.D.

Analysis of stillbirths based on data of the Obstetrical
Clinical of the Leningrad Pediatric Medical Institute.
Akush. i gin. 40 no.5:148-150 S-O '64.   (MIRA 18:5)

1. Kafedra akusherstva i ginekologii (zav. - prof. V.G.Butomo)
Leningradskogo pediatricheskogo meditsinskogo instituta.

KOCHURA, I.I., inzh.

Results of a competition for the best design of precast reinforced concrete supports. Shakht.stroi. 7 no.5:30-31 My '63.

(MIRA 17:4)

1. Gosstroy RSFSR.

1340. EFFECT OF VITAMINS ON THE DETOXICATING FUNCTION OF THE LIVER IN PATIENTS WITH SYPHILIS (Russian text) - Kochura O. D. - NAUCH. ZAP. GORK. INST. DERM. I VENER. KAF. KOZHNO-VENER. BOLEZ. GOMI 1956, 17 (229-234)

156 patients with syphilis were under observation; 78 received in addition to the normal diet optimal doses of vit. A, B_1, B_2, C, PP, D and K, the other 78 served as controls. The impairment of the detoxicating function of the liver which occurred in most patients after novarsenol (neoarsphenamine) and bismuth therapy subsequently gradually subsided, but normalization of liver function was more in evidence in patients who had received vitamins. It is suggested that vitamins should be given to all patients during treatment with arsenical and bismuth preparations as a preventive measure against possible hepatic complications.   (S)

KOCHURA, O. D., Cand Med Sci (diss) -- "Polyvitamine prophylaxis of complica-
tions and side effects in the treatment of syphilis patients". Gor'kiy, 1960.
11 pp (Gor'kiy State Med Inst im S. M. Kirov), (KL,No 14, 1960, 137)

KOCHURA, O.D., kand. med. nauk; FROLOV, F.F., kand. med. nauk

Experience in health education. Vest. derm. i ven. 37 no.12:
55-57 D '63   (MIRA 18:1)

1. Gor'kovskiy kozhno-venerologicheskiy institut (direktor
O.D. Kochura).

KOCHURA, O.D., kand. med. nauk; ANDRIANOVA, V.N., kand. med. nauk; KURITSYNA, S.N., kand. med. nauk

Dermatovenereological service in Gorkiy Province in connection with the public health reorganization. Vest. derm. i ven. 38 no.10:73-75 O '64. (MIRA 18:7)

1. Gor'kovskiy nauchno-issledovatel'skiy kozhno-venerologicheskiy institut (direktor - kand. med. nauk O.D. Kochura) Ministerstva zdravookhraneniya RSFSR.

Kochura, O. Y.

16.3500

30845
3/044/61/000/008/016/039
C111/C333

AUTHOR: Kochura, O. J.

TITLE: On the question concerning the asymptotic expansion of the solution of a boundary value problem

PERIODICAL: Referativnyy zhurnal, Matematika, no. 8, 1961, 45, abstract 8B194.("Tr. Odessk. un-ta. Sb. molodykh uchenykh un-ta", 1958, 148, no. 3, 109-114)

TEXT: The author investigates the asymptotic expansion in powers of the small parameter $1/k$ on the highest derivatives for the solution of the following boundary value problem: Solve the equation

$$\Delta u - k^2 \eta u = - \delta (P, P_0)$$ in the tridimensional space if $\eta = 1$ in a

certain bounded domain and $\eta \equiv 0$ out of this domain; homogeneous contact conditions are prescribed on the boundary of the domain. The first term of the asymptotic expansion taking into account the magnitudes of order $1/k$ was investigated in the article of the reviewer (O. J. Panich, Matem. sb., 1953, 32 (74):1, 385-406). In the paper reviewed, the second term taking into account the order $1/k^2$ is investigated. The

Card 1/2

30945
S/044/61/000/008/016/039
C111/C333

On the question concerning the . . .

author uses the method of the approximative boundary condition of
Leontovich type from the diffraction theory of radio waves.

[Abstracter's note: Complete translation.]

Card 2/2

KOCHURA, P.P.

Subject	:	USSR/Electricity
Card 1/1		Pub. 29 - 16/31
Author	:	Kochura, P. P., Foreman
Title	:	From rheostat repair experience
Periodical	:	Energetik, 11, 24-25, N 1954
Abstract	:	The author briefly describes the improvements which he introduced in repair work on rheostats. Two drawings.
Institution	:	None
Submitted	:	No date

AID P - 1163

KOCHURA, S. T.

Cand Tech Sci - (diss) "Study of several properties of porous bearings of textile machines." Moscow, 1961. 20 pp; (Ministry of Higher and Secondary Specialist Education RSFSR, Moscow Textile Inst); 150 copies; price not given; (KL, 6-61 sup, 219)

GRIGOR'YEV, Ye.T., inshener; KOCHUBAYEV, L.D., inshener; KUROCHKA, A.L.
inshener; SUSLOV, B.V., inshener; TOUKHANOV, B.A., inshener;
SHAPIRO, I.L., inshener.

Design features of the VL23 electric locomotive. Zhel.dor.
transp. 37 no.3:16-22 Mr '56.   (MLRA 9:5)
                   (Electric locomotives)

KOCHURAYEV, L.D., insh.

Structural formulas of the reliability of the electric equipment
of electric locomotives. Elektrotekhnika 35 no.12:36-37 D '64.
(MIRA 18:4)

KOCHUBAY, L.D. (g. Novocherkassk)

Regulating electric equipment of the VL23 electric locomotive.
Elek.i tepl.tiaga 3 no.6:34-36 Je '59.   (MIRA 12:9)
(Electric locomotives--Electric equipment)

KOCHURAYEV, L.D., inzh.

Reliability of the EKG-60/20 group-type controller. Elektro-
tekhnika 35 no.10:28-30 O '64.   (MIRA 17:11)

PETROV, B.P., kand.tekhn.nauk, dotsent; KOCHURAYEV, L.D., insh.

Present state and principal trends in the automation of the
control processes of electric rolling stock. Elektrichestvo
no.1:26-32 Ja '63.   (MIRA 16:2)

1. Moskovskiy energeticheskiy institut (for Petrov). 2. Novo-
cherkasskiy elektrovozostroitel'nyy zavod (for Kochurayev).
            (Automatic control)   (Electric railroads)

KOCHURAYEV, L.D.; KUPRIYANOV, Yu.V.; FEOKTISTOV, V.M.; MAVDRIKOV, F.I.

Eight-axle main line a.c. locomotive N31. Sbor. nauch. trud. KIMII
3:15-21 '63.
(MIRA 17:4)

KOCHURAYEV, L.D.

Design and study of the reliability of electrical apparatus.
Sbor. nauch. trud. ElNII 3:35-55 '63. (MIRA 17:4)

KOCHURAYEV, Lev Dmitriyevich; YAKOVLEV, D.V., inzh., red.; KHITROV, A.P., tekhn.red.

[Group contactors for d.c.electric locomotives] Gruppovye kontaktory elektrovosov postoiannogo toka. Moskva, Vses.izdatel'sko-poligr.ob"edinenie M-va putei soobshcheniia, 1960. 25 p.

(MIRA 13:6)

(Electric locomotives)   (Electric contactors)

KOCHURAYEV, L.D.

Realization of a special case in the law of the invariance of failures in the theory of reliability. Izv. vys. ucheb. zav.; elektromekh. 7 no.6:754-756 '64.   (MIRA 17:7)

L   20373-66   EWT(m)/EWP(v)/EWT(j)/T/ETC(m)-6   WW/RM

ACC NR: AP6006537   (A)   SOURCE CODE: UR/0191/65/000/011/0011/0013

AUTHORS: Popova, G. L.; Khromov, G. L.; Khoroshilova, I. P.; Kochurenkova, O. A.   63
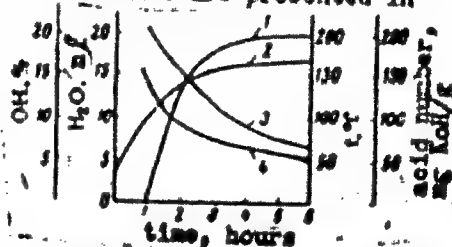   61
ORG: none
                                                                                      B
TITLE: Synthesis of self-extinguishing halogen-containing polymers

SOURCE: Plasticheskiye massy, no. 11, 1965, 11-13

TOPIC TAGS: polymer, polyester, fire resistant material, phenol, glycol, glycerin,
condensation reaction, polyester plastic, hydroxyl group

ABSTRACT: It was the object of the investigation to synthesize a number of fire-
proof polymers on the basis of chlorendicic acid or of its anhydride and of different
polyhydroxyphenols (glycols, glycerin, xylitol, trimethylolpropane, methyltrimethyl-
olmethane, and xylitane) as well as a bromine-containing epoxy resin. The kinetics
of the polymerization was studied, and the experimental results are presented in
tables and graphs (see Fig. 1).
Fig. 1. Kinetics of polyester condensation of the
polymer obtained by condensing chlorendicic an-
hydride, triethyleneglycol, and methyltrimethylol-
methane (mole ratio 1:1:1). 1 - reaction water;
2 - reaction temperature; 3 - hydroxyl content;
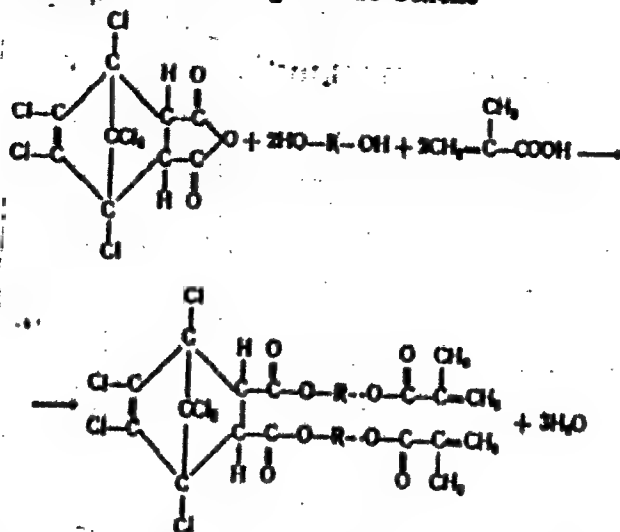4 - acid number.

Card 1/2

UDC: 678.674:678—944

L 20373-66

ACC NR: AP6006537

The polyesters were synthesized according to the scheme

The ignition temperatures of the synthesized polymers were determined and were found to be in the region of 680—9300. It is concluded that the bromine-containing epoxy resin is suitable for use as an adhesive for pressed and laminated plastics. Orig. art. has: 2 tables, 2 graphs, and 1 equation.

Card 2/2 SUB CODE: OZ // SUBM DATE: none/ ORIG REF: 005/ OTH REF: 009 vmb

S.1190

33489
S/195/61/002/005/014/027
E111/E485

AUTHORS: Dzisyak, A.P., Boreskov, G.K., Kasatkina, L.A.,
Kochurikhin, V.Ye.

TITLE: Influence of additions of alkali-metal sulphates on
the catalytic properties of vanadium pentoxide in the
oxygen isotope-exchange reaction

PERIODICAL: Kinetika i kataliz, v.2, no.5, 1961, 727-731

TEXT: The authors report their investigation of the catalytic
activity of vanadium-pentoxide preparations, with additions of
analytical reagent purity sulphates of lithium, sodium, potassium,
rubidium or caesium (0.1 mol per mol of V_2O_5) as promoters, in the
temperature range 400 to 480°C and 40 mm Hg oxygen pressure.
For potassium sulphate mol fractions of 0.025 and 0.05 were also
tested.   The method and apparatus used to study the homomolecular
reaction $O_2^{16} + O_2^{18} = 2O^{16}O^{18}$ were described in an earlier
paper (Ref.6: Kinetika i kataliz, v.2, 1961, 386).   Furthermore,
the isotope exchange of each of the preparations with molecular
oxygen was studied when no homomolecular exchange was taking place.
Results are compared with those for pure vanadium pentoxide

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obtained previously (Ref.3: Kinetika i kataliz, v.1, 1960, 229 and Ref.6: as quoted above). Preliminary experiments had shown that both the rates R and K, respectively, of the catalyst/gas and the homo-molecular follow the first-order equation. When a catalyst enriched by a concentration of O^{18} equal to that in the gas is used, R can be calculated from

$$R = \frac{2.3}{\tau_3} \frac{N_r \cdot N_r}{N_r + N_r} \lg \frac{C_{10}^0 - C_{10}'}{C_{10} - C_{10}'}.\tag{1}$$

and K from

$$K = \frac{2.3}{\tau_3} \lg \frac{C_{34}' - C_{34}}{C_{34} - C_{34}}\tag{2}$$

In the case of simultaneous isotope exchange with the catalyst, the equation is

$$e^{\frac{RS}{N_r}} = \frac{C_{34}^0 - 2C_{34}^0 + 4C_{34}''(C_{34}^0 - C_{34}') + 2(C_{34}^0 - C_{34}')^2 \frac{K - R}{K - 2R}}{C_{34} - 2C_{34} + 4C_{34}'(C_{34} - C_{34}') + 2(C_{34} - C_{34}')^2 \frac{K - K}{K - 2R}}\tag{3}$$

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In these equations R and K are in g/m^2 hour. N_Γ is the amount of oxygen in the gas phase, g; N_T that in the catalyst, g; S is the surface of the catalyst charge, m^2; τ is time, hours; C_{18}^0, C_{18} and C_{18}^K are the O^{18} proportion in the gas at the initial instant, at time τ and at equilibrium, respectively; C_{34}^0, C_{34} and C_{34}^K are the corresponding proportions of $O^{16}O^{18}$. The activation energy and rate values for the two reactions studied were found to be virtually the same. The rates were increased by the presence of the promoters, the order of promoter effectiveness (present in 0.1 mol-fraction concentration) increasing in the following order: $Li_2SO_4 < Na_2SO_4 < K_2SO_4 < Rb_2SO_4 < Cs_2SO_4$. The first increased the rate by 1.2, the last by about 100-fold. Even 0.025 mol of K_2SO_4 per mol pentoxide gave a considerable increase in both K and R, which were also found to be linearly related to the K_2SO_4 concentration. There are 3 figures, 2 tables and 7 references: 4 Soviet-bloc and 3 non-Soviet-bloc. The two references to English language publications read as follows: Ref.2: C.R.Kinney, J.Pincus, Ind. Eng. Chem., v.43, 1931, 2880; H.Hong, Chem. Ind., 1951, 872; Ref.4: Tandy. J. Appl. Chem., v.6, 1956, 68.
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robot gorskogo nauch. - issled.. Vet. in-ta, vyp. 3, 1949, s. 57 - 60.

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